Special Issue

Biomechanics in Sport and Ageing: Artificial Intelligence

Message from the Guest Editors

The aim of this special issue is to provide a scientific platform for a state-of-the-art update on the progress of artificial intelligence, AI, in sport biomechanics and ageing. AI relies on computers to execute commands that historically required human intelligence. As we can surmise it from Turing's seminal paper, AI builds computational units that mimic human intelligence and abilities: language, communication, comprehension of concepts, automated thinking, (machine) learning, computer vision, and movements via robotics [1]. Supervised or unsupervised machine learning, i.e., the science of coding computers to learn and behave as humans do, as a subset of AI, allows us to discern patterns and structure in data. Deep learning optimizes supervised learning and trains models to learn how to map an input to an expected output [2]. These tools of AI are also becoming ubiquitous in sport biomechanics and ageing research.

Guest Editors

Prof. Dr. Tibor Hortobágyi

Dr. Melissa Boswell

Prof. Dr. Ka-Chun (Joseph) Siu

Deadline for manuscript submissions

20 December 2025

Biomechanics

an Open Access Journal by MDPI

Impact Factor 1.4
CiteScore 2.4

mdpi.com/si/200319

Biomechanics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomechanics@mdpi.com

mdpi.com/journal/biomechanics

Biomechanics

an Open Access Journal by MDPI

Impact Factor 1.4
CiteScore 2.4

mdpi.com/journal/biomechanics

MDPI

About the Journal

Message from the Editor-in-Chief

Biomechanics (ISSN 2673-7078) is an international, peer-reviewed, and open access journal devoted to the fast publication of the latest achievements of scientific research in the area of biomechanics. Both experimental and theoretical papers are published. We hope that the submission guidelines and submission template will assist you in your submission of your research to this journal, and that you will enjoy reading the articles in Biomechanics.

Editor-in-Chief

Prof. Dr. Tibor Hortobágyi
1. Research Professor, Department of Kinesiology, Hungarian University of Sports Science, 1123 Budapest, Hungary
2. Research Professor, Institute of Sport Sciences and Physical Education, Faculty of Sciences, University of Pécs, 7624 Pécs, Hungary
3. Professor Emeritus of Movement and Healthy Ageing, Department of Human Movement Sciences, University Medical Center Groningen, 9700 Groningen, The Netherlands

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23 days after submission; acceptance to publication is undertaken in 7.7 days (median values for papers published in this journal in the first half of 2025).